

CLAIMS

What is claimed is:

1. A digital receiver, comprising:
a memory card storing a main program;
a memory;
a central processing unit controlling operations of the digital receiver and the memory;
a memory card interface electrically coupling the memory card and the central processing unit; and

a key input unit receiving a control command from a user and outputting a key signal to the central processing unit to control the memory card to directly download the main program from the memory card to the memory.

2. The digital receiver as recited in claim 1, wherein the main program has a predetermined file extension.

3. The digital receiver as recited in claim 1, wherein the memory card interface allows the central processing unit to control an address structure of the main program recorded in the memory card.

4. The digital receiver as recited in claim 1, wherein the memory stores information under a control of the central processing unit and stores a boot program having information about the memory card interface.

5. The digital receiver as recited in claim 4, wherein the memory stores a boot program in an upper memory area and the main program in a lower memory area.

6. The digital receiver as recited in claim 1, wherein the key signal is set by a signal input when an up-key and a down-key of the key input unit are simultaneously pressed.

7. The digital receiver as recited in claim 1, wherein the memory card comprises one of a memory stick, a media card, a SD memory card, a compact flash, and a smart media.

8. The digital receiver as recited in claim 1, wherein the memory card stores the main program to perform various functions of the digital receiver and to execute audio/video data.

9. The digital receiver as recited in claim 4, wherein the boot program enables the central processing unit to recognize the memory card through the memory card interface and to control the information recorded in the memory card.

10. The digital receiver as recited in claim 1, wherein the memory card comprises an ISN pin connected to an insert recognition terminal of the memory card interface.

11. The digital receiver as recited in claim 10, wherein when the memory card is inserted into the memory card interface, a logic voltage of the insert recognition terminal is converted from "low" (0) to "high" (1), and the memory card interface causes an interrupt and sends a memory card insert signal to the central processing unit to trigger a search of the main program in the memory card through the memory card interface.

12. The digital receiver as recited in claim 1, wherein the main program performs functions of the digital receiver comprising a User Interface (UI) and/or an Electronic Program Guide (EPG).

13. A method of downloading a main program from a memory card in a digital receiver, wherein the digital receiver comprises a central processing unit, a memory, a memory card interface, and a key input unit, the method comprising:

- executing a boot program to initialize the digital receiver;
- detecting a memory card insert signal triggering a search of a file having a predetermined file extension in the memory card through the memory card interface;
- reading and storing the file in an auxiliary memory;
- reading a header of the file read having the file extension and performing a checksum;
- determining whether the file read is the main program;
- downloading the main program to the memory; and
- determining whether the main program is downloaded by checking information of the file recorded in the header and a capacity of the main program recorded in the memory.

14. The method as recited in claim 13, further comprising:
executing the main program to perform functions of the digital receiver when the main program is stored in the memory.

15. A method of downloading a main program from a memory card in a digital receiver using a data control unit (DCU) or a serial communication, wherein the digital receiver comprises a central processing unit, a memory, a memory card interface, and a key input unit, the method comprising:

executing a boot program;
receiving a memory card selection key signal to download a main program directly from the memory card through the memory card interface, wherein the memory card selection key signal is set by an input signal from the key input unit;
downloading the main program from the PC through the DCU when the memory card selection key signal is not input;
downloading the main program from the PC through the serial communication when the DCU is unavailable and the memory card selection key signal is not input;
storing the main program in the memory;
re-booting the system through a reset; and
executing the main program.

16. The method as recited in claim 15, further comprising:
determining whether a memory card insert signal is supplied to download the main program from the memory card when the serial communication and DCU are unavailable; and
downloading the main program from the memory card through the memory interface when the memory card insert signal is supplied.

17. The method as recited in claim 15, further comprising:
displaying an error when the main program cannot be downloaded from the memory card.

18. The method as recited in claim 15, wherein the user manipulates the key input unit to input to the central processing unit the memory card selection key signal allowing the main program to be directly downloaded from the memory card.

19. The method as recited in claim 15, wherein the memory card selection key signal is pre-set by the predetermined key signal of the key input unit provided on the digital receiver or a predetermined key signal of a remote controller.